

Agricultural Tariff Schedules of the United States, European Union, and Japan

This section presents a more detailed examination of the agricultural tariff schedules for three of the world's largest importers of agricultural goods, the United States, the EU, and Japan. These schedules are among the most complex in the world, consisting of a mix of tariffs and TRQs, with a combination of ad valorem and non-ad valorem rates. Some of the rates vary over the course of the year. Some are set on the basis of a complex technical relationship, while others are a combination of ad valorem and specific rates, set up so that either component can be binding. This section provides a detailed picture, on a commodity basis, of where bound tariffs in each country's schedule remain high and where they are already low or zero.

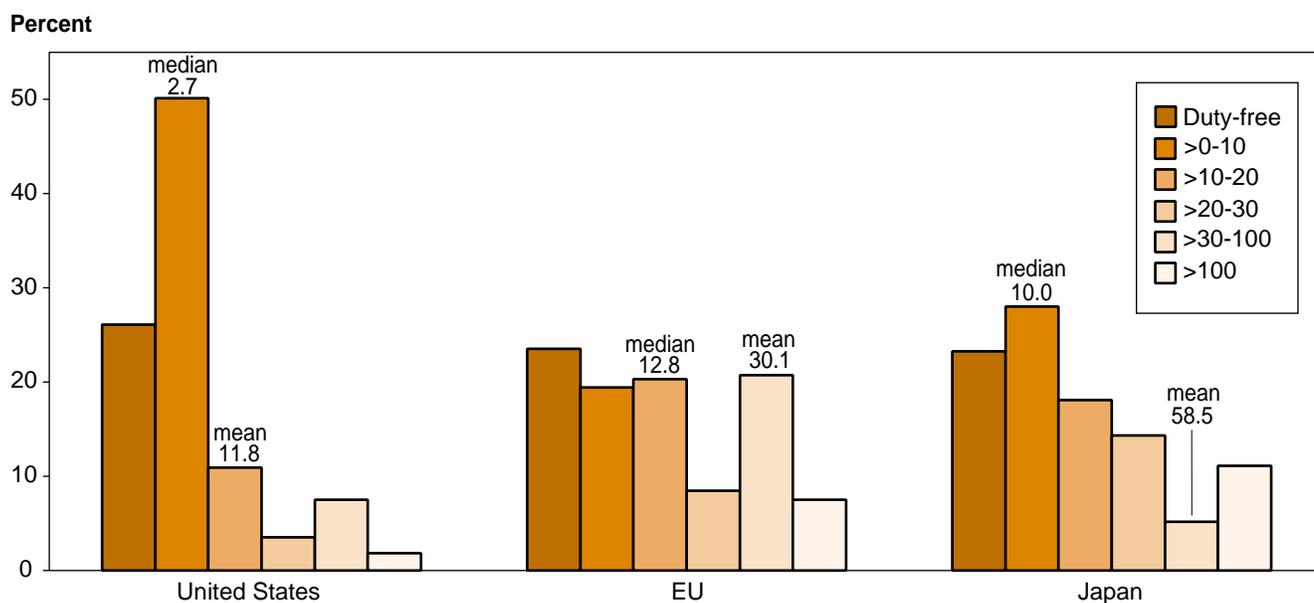
Measuring the Impact of High Tariffs

Figure 8 consists of three histograms containing the proportion of each country's tariff-lines falling in 6 categories ranging from zero (duty-free) tariffs to tariffs greater than 100 percent. This breakout illustrates that there are both widespread differences in the distribution of agricultural tariffs across the three countries and that none of the countries' tariff schedules are dis-

tributed symmetrically around the tariff mean. Distributions such as these are described as being highly skewed to the right, meaning that the tariffs continue much farther to the right of the mean than to the left. This is somewhat obscured by the fact that, in figure 8, all tariffs above 100 percent are lumped into one interval on the far right of each distribution. About 2 percent (24 tariff-lines) of the U.S. schedule consists of tariffs above 100 percent, with the highest rate equaling 350 percent. For the EU the figures are 8 percent (141 lines) with a high rate of over 500 percent, while 11 percent (142 lines) of Japan's schedule is made up of megatariffs, with the highest rate exceeding 2,000 percent.

As shown in figure 8, the means for each of these countries are clearly inflated by the presence of a relatively small number of very high rates. As discussed previously, for skewed distributions, the mean alone is not sufficient to characterize the overall level of tariffs. Medians provide a useful complement since they are robust to outliers. In each case, the tariff medians are considerably lower than the tariff means. In contrast to the median, which defines the center of the distribution in each country's tariff schedule, only 12 percent of Japan's agricultural tariffs are larger than its tariff mean. Only 21 percent of U.S. tariffs are greater than the mean, while in the EU's schedule only 28 percent of all tariffs exceed the mean.

Figure 8
Relative frequency distributions of agricultural tariffs for the United States, EU, and Japan¹



¹Tariffs are bound MFN rates based on final URAA implementation.

Source: Economic Research Service, USDA

The mean, median, and frequency of distribution give a more complete picture of each country's agricultural tariff schedule as well as additional information useful when comparing tariff schedules across countries. Judging from these measures, the overall level of tariff protection in the EU and Japan is considerably higher than in the United States. But the picture is not as

clear when comparing the EU and Japan, since the relative size of their tariff means and medians differs, with the EU having a lower mean but a higher median. What is clear, though, is the extent to which each country's tariff mean is inflated by the presence of megatariffs in each schedule.

Table 7—Mean, median, and number of megatariffs of the United States, the EU, and Japan¹

	United States			EU			Japan		
	Mean	Median	Megatariffs	Mean	Median	Megatariffs	Mean	Median	Megatariffs
All commodities	12	3	24	30	13	141	58	10	142
Grains	2	1	--	53	63	2	191	3	7
Grain products	8	2	--	48	45	2	162	24	26
Feed	15	0	2	47	11	9	9	0	--
Starches	1	1	--	24	20	--	126	53	3
Oilseeds	17	0	2	0	0	--	72	0	2
Oilcake	2	2	--	3	0	--	1	0	--
Vegetable oils	4	2	--	13	6	1	10	9	--
Fats & oils	3	2	--	10	3	1	4	4	--
Live animals	1	0	--	30	22	--	107	0	5
Meat: fresh, or frozen other meat	1	0	--	70	74	29	39	0	2
Meat: fresh beef, pork, or poultry	12	1	--	41	27	6	45	7	3
Meat: frozen beef, pork, or poultry	9	5	--	66	38	24	38	9	3
Meat: prepared	2	2	--	43	26	7	79	20	7
Skins & hides	0	0	--	0	0	--	1	0	--
Dairy	43	38	7	87	70	41	322	227	48
Eggs	9	8	--	22	24	--	18	21	--
Fruit: Fresh	4	1	--	21	12	1	10	6	--
Fruit: Frozen	8	9	--	20	21	--	9	10	--
Fruit: dried & fresh (coconuts, dates & figs)	8	4	--	4	6	--	3	3	--
Fruit: dried (raisins)	2	2	--	2	2	--	1	1	--
Fruit: preparations	6	4	--	21	21	--	18	17	--
Fruit juice	0	0	--	37	22	3	22	23	--
Vegetables: fresh	7	4	--	16	10	2	3	3	--
Vegetables: frozen	9	8	--	14	15	--	10	10	--
Vegetables: frozen or prepared (other)	6	5	--	18	12	1	110	9	1
Vegetables: dried & fresh roots & tubers	6	5	--	38	16	--	7	7	--
Vegetables: dried	3	2	--	2	0	--	197	6	6
Vegetables: preparations	6	5	--	21	14	2	13	13	--
Vegetable juice: tomato	--	--	--	16	16	--	26	26	--
Nuts	17	3	3	5	4	--	8	8	--
Nuts & fruit: dried, fresh, & prepared	6	4	--	16	17	--	13	12	--
Horticulture: live	10	1	--	5	7	--	0	0	--
Horticulture: cut flowers & foliage	4	4	--	5	3	--	2	3	--
Sugar beet	0	0	--	349	349	2	0	0	--
Sugar cane	1	1	--	56	56	--	--	--	--
Sweeteners	46	51	5	59	57	8	82	55	13
Tobacco: unmanufactured	83	5	3	14	11	--	0	0	--
Tobacco: products	102	9	1	38	34	--	9	3	--
Fiber	3	0	--	0	0	--	21	0	2
Food preparations	17	10	--	15	13	--	52	21	10
Coffee	0	0	--	6	8	--	6	6	--
Coffee: other	5	1	--	10	12	--	37	17	2
Tea & tea extracts	7	3	--	2	0	--	57	17	2
Cocoa beans & products	18	18	--	17	15	--	16	14	--
Spices	1	0	--	2	0	--	2	0	--
Essential oils	1	0	--	3	3	--	2	2	--

-- = not applicable.

¹ Tariffs are bound MFN rates based on final URAA implementations.

Source: Economic Research Service, USDA.

Finding Megatariffs by Commodity Groupings

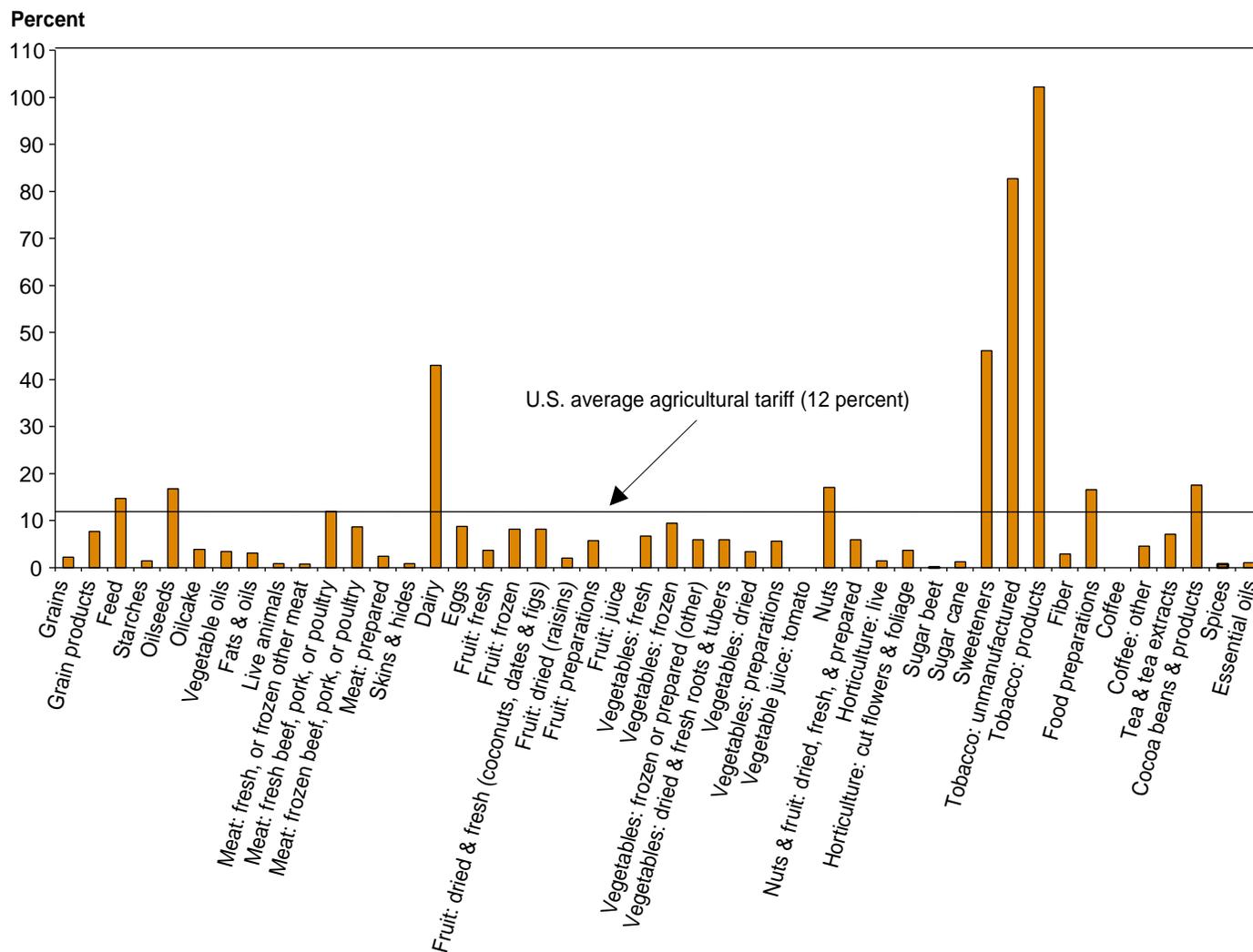
This section focuses on how agricultural tariffs differ across commodity sectors and identifies which products are subject to high tariffs that might preclude profitable trade from taking place. Figures 9-11 display the tariff means for the same 46 commodity groupings used in the previous section, comparing these means with the overall tariff mean for each country.¹⁰ The individual commodity means exceed the country's overall mean in only between 10 (U.S.) and 14 (EU) of the 46 product categories in each country. In seven of the commodity

¹⁰ Recall that these groupings represent a subset of all the agriculture tariffs in the countries' schedules. Some of the missing lines represent sectors where tariff equivalents cannot be calculated, e.g., alcoholic beverages.

sectors in Japan and in one each in the United States and the EU the means are greater than or equal to 100 percent.

In addition to containing the means found in figures 9-11, table 7 gives the tariff medians for these commodity groups and identifies the extent to which megatariffs are being applied in each group. Large differences between the mean and median tariffs indicate that a few, extremely high rates distort the mean. Megatariffs are found in between 7 (U.S.) and 17 (EU and Japan) of the 46 product categories in each country. It is interesting to note where the differences and similarities lie in the levels of tariff protection each country accords its agricultural and agri-food producers and how these compare with the overall level of tariff protection.

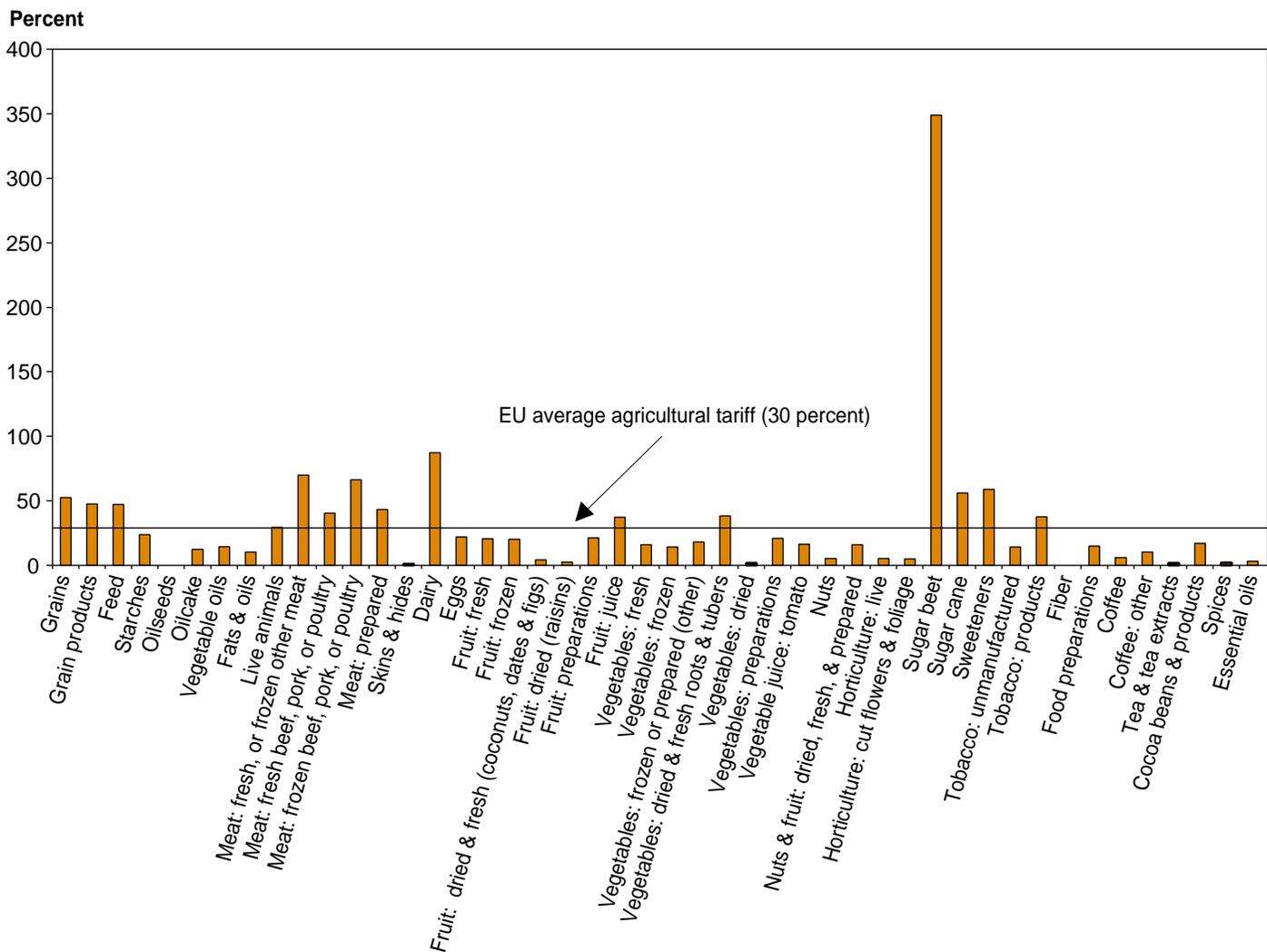
Figure 9
United States averages by commodity group¹



¹Tariffs are bound MFN rates based on final URAA implementation.

Source: Economic Research Service, USDA

Figure 10
EU averages, by commodity group¹

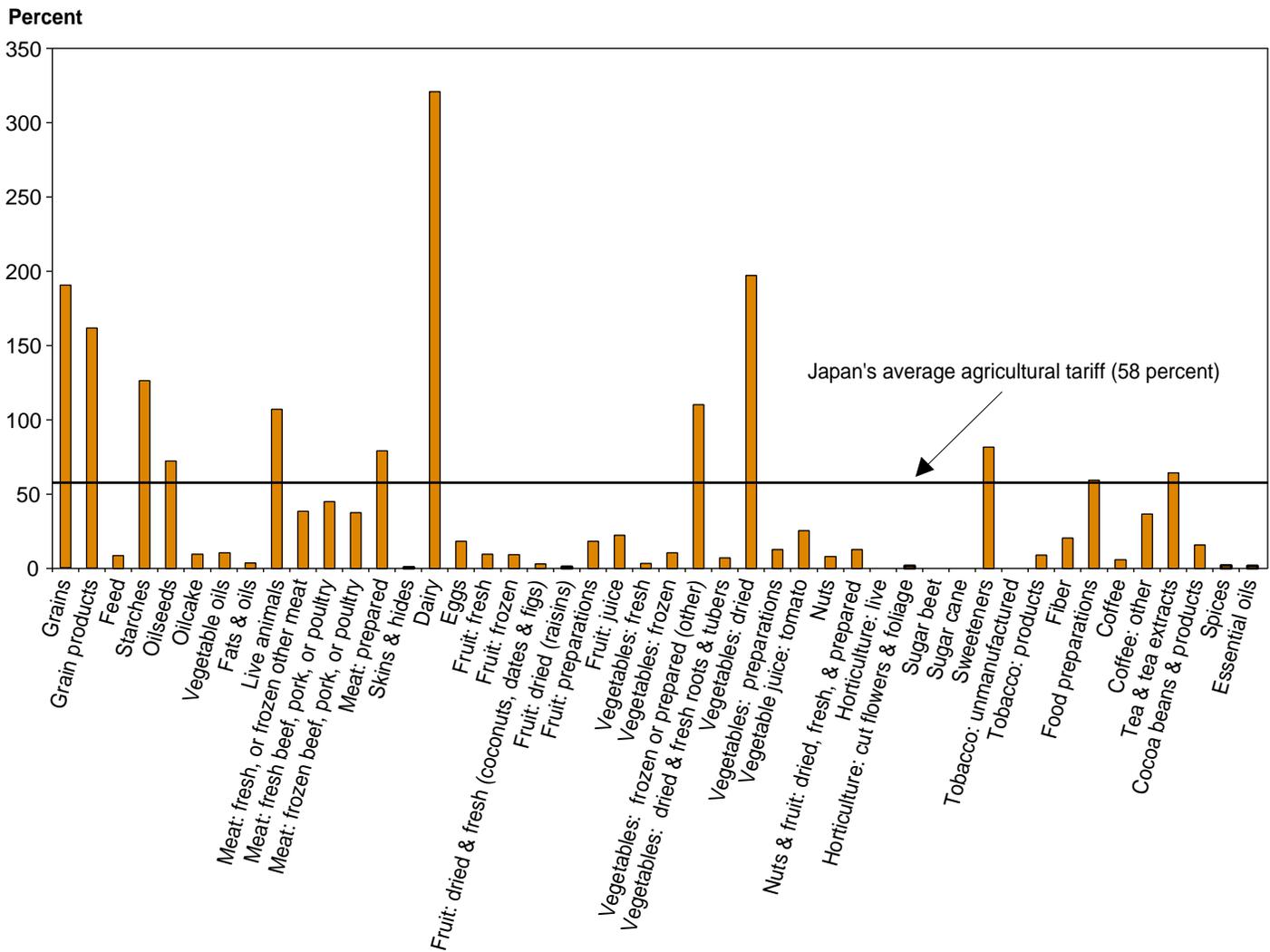


¹Tariffs are bound MFN rates based on final URAA implementation.
 Source: Economic Research Service, USDA

The highest mean tariffs in the United States are the result of some very high duties levied on imports of tobacco products and unmanufactured tobacco. Even though most of the tariffs in these categories are below 10 percent, the means are inflated by the presence of seven megatariffs (all equal to 350 percent), each of which is an over-quota rate in a TRQ. The mean tariff on products in the sweeteners category is also high. While it contains only two megatariffs (on glucose and fructose imports), a large proportion of the duties in this category exceed 50 percent. All of these high tariffs form the over-quota rates of a TRQ. A high mean and median, as well as the largest number of megatariffs, are found in the dairy sector. The seven megatariffs in this category apply to the imports of dairy

products other than cheese or butter (including milk and cream, yogurt, and sour cream). Similar to sweeteners, the high median indicates that most of the other rates in the dairy group are also fairly high (over 65 percent of all dairy tariffs are above 30 percent). All of these high dairy tariffs are the over-quota rates of a TRQ. Other commodity groups with means above the overall average include cocoa beans and products, feeds (oilmeals, pellets, and other feeding residues), food preparations (including sauces, soups, and condiments), oilseeds, and tree nuts. The oilseeds category contains two of the highest tariffs in the U.S. schedule, on shelled and unshelled peanuts, but generally low tariffs across all other oilseeds, and thus has a mean of only 17 percent. All 24 of the megatariffs in the U.S.

Figure 11
Japan averages, by commodity group¹



¹Tariffs are bound MFN rates based on final URAA implementation.
 Source: Economic Research Service, USDA

schedule form the over-quota tariff in a TRQ, so some market access is being provided at the lower in-quota rates.

The EU's highest tariff rates affect mainly products in the dairy and meat sectors. Of the EU's 141 megatariffs, 70 percent are found in these product categories. In the dairy sector, megatariffs are applied on almost all items with the exception of cheeses, while most of the meat megatariffs apply to the imports of beef, lamb/mutton, and goat meat. While the means are somewhat inflated by the presence of these high rates, overall the tariffs in both sectors tend to be high, with 78 percent of dairy tariffs and 57 percent of meat tariffs bound above 30 percent. Most of the meat megatariffs form the over-quota portion of a tariff-rate

quota (TRQ), so there might be some possibility of market access at the lower in-quota rate. However, with the exception of some TRQs for butter, the high dairy tariffs are not associated with a TRQ, thus these tariffs would apply on all imports. Other commodity sectors with high mean tariffs include sugar beet, sugar cane, sweeteners, grains, grain products, and prepared feeds. Most of these categories also have high median tariffs, since a large proportion of the tariffs in these categories are quite high. The maximum EU tariff is 540 percent, applied to imports of dried or powdered sugar beets (which contributes to the high average for sugar beets in figure 10). Some other product lines affected by megatariffs include grape juice, prepared or preserved mushrooms, and bananas.

Among Japan's 142 tariff-lines subject to rates in excess of 100 percent are 49 of the 50 highest bound tariffs found within the three countries. The highest commodity tariff mean is that for dairy products, with an average of 322 percent. Megatariffs account for 63 percent of all tariff-lines in the dairy sector, with 20 of these rates exceeding 500 percent. The median tariff of 227 indicates how high the bulk of tariffs are in this sector. As with the EU, all dairy imports, with the exception of cheese, are protected by megatariffs. Unlike the EU, however, most of these rates form the over-quota tariff of a TRQ. Imports of dried legumes are also subject to TRQs with very high over-quota rates and are the reason why the mean on dried vegetables of 197 is so high. The means on the grains, 191, and grain products, 162, are also very high, largely a result of Japan's having recently tariffed its protection on the imports of rice and rice products. Tariffs on individual tariff lines in these three groups include 43 megatariffs, nine of which range from 710 percent to 1,364 percent on various categories of rice. The production of starches is also a highly protected industry in Japan, with tariffs averaging 126 percent. The live animals category has a very high average tariff, but a zero median tariff. Imports of certain breeds of horses, buffalo, and swine are subject to megatariffs, while imports of all other animals in this category are permitted duty-free entry. A large number of megatariffs are also applied on imports of meats and sweeteners. The highest Japanese tariff, of over 2,000 percent, is applied to imports of konnyaku (konjac) tubers, a product found in the other vegetables category.

Existing Low or Zero Tariffs

While high tariff rates affect several products in the United States, EU, and Japan, some product groups face zero or very low tariffs. In particular, skins and hides, certain fibers (cotton, wool, flax, and hemp), a wide range of horticultural products, dried fruit, coffee, tea, and essential oils tend to enter each country duty-free or at a very low duty.

If low tariff rates are defined as those below 10 percent (single digits), then the corresponding proportion of low agricultural tariff-lines is equal to 76 percent in the U.S. schedule, 50 percent in Japan, and 43 percent in the EU. Thirty-four of the 46 commodity groupings in the U.S. tariff schedule have average tariffs at or

below 10 percent, while 18 in Japan and 14 in the EU fall into this category. In many cases, these low tariffs are applied to raw materials, with the corresponding processed products subject to higher rates. Grains and oilseeds are generally subject to lower tariff rates than their products in the United States and Japan; the tariffs on live animals are less than those on meats in the United States and the EU, and raw tobacco faces lower tariffs than tobacco products in all three countries. This suggests that there are a number of incidences of tariff escalation in these countries, although the evidence should be interpreted with caution, given the aggregate level of the analysis.

Summing Up United States, EU, and Japan Comparisons

Prohibitive tariffs block trade in many agricultural products, particularly in Japan and the EU. The existence of triple-digit tariffs alongside zero tariffs illustrates the extremes that characterize the distribution. The analysis identifies product categories with megatariffs that could block trade and highlights differences between means and medians that indicate where a few, highly protected products have a distorting effect on the average rate of protection.

Across commodity groupings, broad similarities exist in the level and distribution of tariff protection within countries. The results demonstrate that, while the tariffs most critical for protection of the domestic agricultural sector might differ somewhat by country, they generally are only a subset of the country's total agricultural tariff schedule. Dairy and sugar products are highly protected in all three countries, while hides and skins and fibers are almost free of protection. On the other hand, levels of protection vary greatly among some commodities in all three countries for various reasons. Japan applies high tariffs on raw silk and silk cocoon imports, while they enter the United States and EU at zero or minimal duties. Because of its proximity to neighboring sugar beet producing countries, the EU applies a high tariff on sugar beet imports, while the United States and Japan allow sugar beets duty-free entry, relying instead on high transport costs to provide protection to producers. The United States imposes its highest tariffs on tobacco and tobacco products, which Japan imports duty-free and the EU at relatively low duties.